# Algebra/Data Analysis Toolkit: Indicator 3.2.1

Student Handout: Algebra/Data Analysis: Indicator 3.2.1

## Goal 3.0 Data Analysis And Probability

Expectation 3.2 The student will apply the basic concepts of statistics and probability to predict possible outcomes of real-world situations.

Indicator 3.2.1 The student will make informed decisions and predictions based upon the results of simulations and data from research.

### Public Release - Selected Response I tem - Released in 2009

Algebra/Data Analysis Indicator 3.2.1

A box of cereal contains 1 of 5 different prizes. A simulation was conducted to predict how many boxes of cereal must be bought in order to get all 5 prizes. The results of 30 trials are shown in the stem-and-leaf plot below.

#### NUMBER OF BOXES BOUGHT

	0	5 8 9	
	1	3 5 6 7 8 8 9 9	
	2	1 1 2 2 3 4 5 8	8 9
	3	0 1 2 3 3 5 6 7	
	4	5	
<b>KEY</b> 1   5 = 15			

Based on the results of the simulation, what is the total number of people out of 150 who would need to buy less than 10 boxes of cereal to get all 5 prizes?

- A. 3
- B. 5
- C. 15
- D. 30

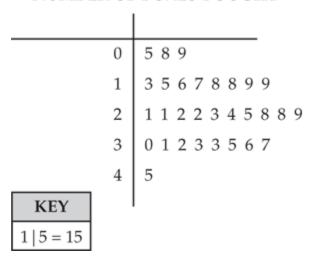
Correct Answer

C. 15

#### Item

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